



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/674,087  
Source: IFWB  
Date Processed by STIC: 7/16/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 10/674,087

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos     The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length     The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering     The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII     The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length     Sequence(s)          contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"     A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)         . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)     Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence  
 (2) INFORMATION FOR SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)  
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: X: (insert SEQ ID NO where "X" is shown)  
 This sequence is intentionally skipped  
 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences
- 8      Skipped Sequences  
    (NEW RULES)     Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence  
 <210> sequence id number  
 <400> sequence id number  
 000
- 9      Use of n's or Xaa's  
    (NEW RULES)     Use of n's and/or Xaa's have been detected in the Sequence Listing.  
 Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>  
    Response     Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or  
scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or  
 is Artificial Sequence
- 11      Use of <220>     Sequence(s)          missing the <220> "Feature" and associated numeric identifiers and responses.  
 Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or  
 "Unknown." Please explain source of genetic material in <220> to <223> section.  
 (See "Federal Register," 00/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"     Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,  
 resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence  
 listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13      Misuse of n/Xaa     "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFWO

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/674,087

DATE: 07/16/2004

TIME: 07:34:20

Input Set : A:\MIT-0507.ST25.txt

Output Set: N:\CRF4\07162004\J674087.raw

3 &lt;110&gt; APPLICANT: et al., Chen

4 Chen, et al.,

6 &lt;120&gt; TITLE OF INVENTION: Compositions and Methods for Delivery of Short Interfering

RNA

7 and Short Hairpin RNA

9 &lt;130&gt; FILE REFERENCE: 0492611-0507

11 &lt;140&gt; CURRENT APPLICATION NUMBER: 10/674,087

12 &lt;141&gt; CURRENT FILING DATE: 2003-09-29

14 &lt;160&gt; NUMBER OF SEQ ID NOS: 32

16 &lt;170&gt; SOFTWARE: PatentIn version 3.2

18 &lt;210&gt; SEQ ID NO: 1

19 &lt;211&gt; LENGTH: 21

20 &lt;212&gt; TYPE: DNA

21 &lt;213&gt; ORGANISM: siRNA targeted to GFP (sense strand)

23 &lt;400&gt; SEQUENCE: 1

24 ggcuacgucc aggagcgc t

27 &lt;210&gt; SEQ ID NO: 2

28 &lt;211&gt; LENGTH: 21

29 &lt;212&gt; TYPE: DNA

30 &lt;213&gt; ORGANISM: siRNA targeted to GFP (antisense strand)

32 &lt;400&gt; SEQUENCE: 2

33 ugcgcuuccug gacguagcct t

36 &lt;210&gt; SEQ ID NO: 3

37 &lt;211&gt; LENGTH: 21

38 &lt;212&gt; TYPE: DNA

39 &lt;213&gt; ORGANISM: siRNA targeted to influenza virus NP transcript (sense strand)

41 &lt;400&gt; SEQUENCE: 3

42 ggauuuuuu ucuucggagt t

45 &lt;210&gt; SEQ ID NO: 4

46 &lt;211&gt; LENGTH: 21

47 &lt;212&gt; TYPE: DNA

48 &lt;213&gt; ORGANISM: siRNA targeted to influenza virus NP transcript (antisense strand)

50 &lt;400&gt; SEQUENCE: 4

51 cuccgaagaa auaagaucct t

54 &lt;210&gt; SEQ ID NO: 5

55 &lt;211&gt; LENGTH: 21

56 &lt;212&gt; TYPE: DNA

57 &lt;213&gt; ORGANISM: siRNA targeted to influenza virus PA transcript (sense strand)

59 &lt;400&gt; SEQUENCE: 5

60 gcaauugagg agugccugat t

63 &lt;210&gt; SEQ ID NO: 6

64 &lt;211&gt; LENGTH: 21

65 &lt;212&gt; TYPE: DNA

66 &lt;213&gt; ORGANISM: siRNA targeted to influenza virus PA transcript (antisense strand)

mandatory, <213> response has to  
be either  
Artificial/Unknown or Genus/Species  
Does Not Comply (ps. 1-6)  
Corrected Diskette Needed  
← please move this  
Response to section  
21  
220 - 223.

pls  
move this response  
to section 21  
220 -  
223.

↑ pls see item #  
10 on error summary  
sheet. 7/16/04

## RAW SEQUENCE LISTING

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DATE: 07/16/2004

TIME: 07:34:20

Input Set : A:\MIT-0507.ST25.txt

Output Set: N:\CRF4\07162004\J674087.raw

68 <400> SEQUENCE: 6  
 69 ucaggcacuc cucaauugct t  
 72 <210> SEQ ID NO: 7  
 73 <211> LENGTH: 21  
 74 <212> TYPE: DNA  
 75 <213> ORGANISM: siRNA targeted to influenza virus PB-1 transcript (sense strand)  
 77 <400> SEQUENCE: 7  
 78 gaucuguucc accauugaat t  
 81 <210> SEQ ID NO: 8  
 82 <211> LENGTH: 21  
 83 <212> TYPE: DNA  
 84 <213> ORGANISM: siRNA targeted to influenza virus PB-1 transcript (antisense strand)  
 86 <400> SEQUENCE: 8  
 87 uucaauggug gaacagauct t  
 90 <210> SEQ ID NO: 9  
 91 <211> LENGTH: 21  
 92 <212> TYPE: DNA  
 93 <213> ORGANISM: siRNA targeted to influenza virus NP transcript (sense strand)  
 95 <400> SEQUENCE: 9  
 96 uagagagaau ggugcucuct t  
 99 <210> SEQ ID NO: 10  
 100 <211> LENGTH: 21  
 101 <212> TYPE: DNA  
 102 <213> ORGANISM: siRNA targeted to influenza virus NP transcript (antisense strand)  
 104 <400> SEQUENCE: 10  
 105 gagagcacca uucucucuat t  
 108 <210> SEQ ID NO: 11  
 109 <211> LENGTH: 21  
 110 <212> TYPE: DNA  
 111 <213> ORGANISM: siRNA targeted to influenza virus M transcript (sense strand)  
 113 <400> SEQUENCE: 11  
 114 ccgaggucga aacguacgut t  
 117 <210> SEQ ID NO: 12  
 118 <211> LENGTH: 21  
 119 <212> TYPE: DNA  
 120 <213> ORGANISM: siRNA targeted to influenza virus M transcript (antisense strand)  
 122 <400> SEQUENCE: 12  
 123 acguacguuu cgaccucggt t  
 126 <210> SEQ ID NO: 13  
 127 <211> LENGTH: 21  
 128 <212> TYPE: DNA  
 129 <213> ORGANISM: siRNA targeted to influenza virus PB-1 transcript (sense strand)  
 131 <400> SEQUENCE: 13  
 132 caggauacac cauggauact t  
 135 <210> SEQ ID NO: 14  
 136 <211> LENGTH: 21  
 137 <212> TYPE: DNA  
 138 <213> ORGANISM: siRNA targeted to influenza virus PB-1 transcript (antisense strand)  
 140 <400> SEQUENCE: 14

↓ move responses  
 to section 2207-  
 2237.

↓ some  
 errors

↪ pls see item # 10 on  
 error summary sheet.

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Input Set : A:\MIT-0507.ST25.txt

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Same errors  
↓

141 guauccaugg uguauccugt t 21

144 <210> SEQ ID NO: 15

145 <211> LENGTH: 20

146 <212> TYPE: DNA

147 <213> ORGANISM: shRNA targeted to influenza virus NP transcript (sense portion)

149 <400> SEQUENCE: 15

150 ggaucuuauu ucuucggaga 20

153 <210> SEQ ID NO: 16

154 <211> LENGTH: 20

155 <212> TYPE: DNA

156 <213> ORGANISM: shRNA targeted to influenza virus NP transcript (antisense portion)

158 <400> SEQUENCE: 16

159 ucuccgaaga aaauagaucc 20

162 <210> SEQ ID NO: 17

163 <211> LENGTH: 57

164 <212> TYPE: DNA

165 <213> ORGANISM: oligonucleotide for construction of shRNA targeted to influenza virus NP transcript

167 <400> SEQUENCE: 17

168 tggatcttat ttcttcggag attcaagaga tctccgaaga aataagatcc ttttttc 57

171 <210> SEQ ID NO: 18

172 <211> LENGTH: 61

173 <212> TYPE: DNA

174 <213> ORGANISM: oligonucleotide for construction of shRNA targeted to influenza virus NP transcript

176 <400> SEQUENCE: 18

177 tcgagaaaaa aggatcttat ttcttcggag atctcttgaa tctccgaaga aataagatcc 60

179 a 61

182 <210> SEQ ID NO: 19

183 <211> LENGTH: 55

184 <212> TYPE: DNA

185 <213> ORGANISM: oligonucleotide for construction of shRNA targeted to influenza virus PB1 transcript

187 <400> SEQUENCE: 19

188 tgatctgttc caccattgaa ttcaagagat tcaatggtgg aacagatctt ttttc 55

191 <210> SEQ ID NO: 20

192 <211> LENGTH: 59

193 <212> TYPE: DNA

194 <213> ORGANISM: oligonucleotide for construction of shRNA targeted to influenza virus PB1 transcript

196 <400> SEQUENCE: 20

197 tcgagaaaaa agatctgttc caccattgaa tctcttgaat tcaatggtgg aacagatca 59

200 <210> SEQ ID NO: 21

201 <211> LENGTH: 56

202 <212> TYPE: DNA

203 <213> ORGANISM: oligonucleotide for construction of shRNA targeted to respiratory syncytial virus transcript

205 <400> SEQUENCE: 21

206 tgcgataata taactgcaag attcaagaga tcttgcagtt atattatcgt tttttc 56

209 <210> SEQ ID NO: 22

210 <211> LENGTH: 60

211 <212> TYPE: DNA

212 <213> ORGANISM: oligonucleotide for construction of shRNA targeted to respiratory

syncytial virus transcript  
214 <400> SEQUENCE: 22

same  
error



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Some  
Errors  
✓

215 tcgagaaaaa acgataatat aactgcaaga tctcttgaat cttgcagtta tattatcgca 60

218 &lt;210&gt; SEQ ID NO: 23

219 &lt;211&gt; LENGTH: 19

220 &lt;212&gt; TYPE: DNA

221 &lt;213&gt; ORGANISM: siRNA targeted to respiratory syncytial virus transcript (sense strand)

223 &lt;400&gt; SEQUENCE: 23

224 cgataatata actgcaaga 19

227 &lt;210&gt; SEQ ID NO: 24

228 &lt;211&gt; LENGTH: 19

229 &lt;212&gt; TYPE: DNA

230 &lt;213&gt; ORGANISM: siRNA targeted to respiratory syncytial virus transcript (antisense strand)

232 &lt;400&gt; SEQUENCE: 24

233 tcttgcagtt atattatcg 19

236 &lt;210&gt; SEQ ID NO: 25

237 &lt;211&gt; LENGTH: 55

238 &lt;212&gt; TYPE: DNA

239 &lt;213&gt; ORGANISM: oligonucleotide for construction of shRNA targeted to influenza virus PA transcript

241 &lt;400&gt; SEQUENCE: 25

242 tgcaattgag gagtgcctga ttcaagagat caggcactcc tcaattgctt ttttc 55

245 &lt;210&gt; SEQ ID NO: 26

246 &lt;211&gt; LENGTH: 59

247 &lt;212&gt; TYPE: DNA

248 &lt;213&gt; ORGANISM: oligonucleotide for construction of shRNA targeted to influenza virus PA transcript

250 &lt;400&gt; SEQUENCE: 26

251 tcgagaaaaa agcaattgag gagtgcctga tctcttgaat caggcactcc tcaattgca 59

254 &lt;210&gt; SEQ ID NO: 27

255 &lt;211&gt; LENGTH: 9

256 &lt;212&gt; TYPE: DNA

257 &lt;213&gt; ORGANISM: loop sequence for shRNA

259 &lt;400&gt; SEQUENCE: 27

260 uucaagaga 9

263 &lt;210&gt; SEQ ID NO: 28

264 &lt;211&gt; LENGTH: 60

265 &lt;212&gt; TYPE: DNA

266 &lt;213&gt; ORGANISM: shRNA targeted to influenza virus NP transcript

268 &lt;400&gt; SEQUENCE: 28

269 cgggguggau cuuauuucuu cggaggcagg uccacuccga agaaauaaga uccuuccug 60

272 &lt;210&gt; SEQ ID NO: 29

273 &lt;211&gt; LENGTH: 60

274 &lt;212&gt; TYPE: DNA

275 &lt;213&gt; ORGANISM: shRNA targeted to GFP transcript

277 &lt;400&gt; SEQUENCE: 29

278 cggggguugcg cuccuggacg uagccgcagg uccaggcuac guccaggagc gcauuccug 60

281 &lt;210&gt; SEQ ID NO: 30

282 &lt;211&gt; LENGTH: 119

283 &lt;212&gt; TYPE: DNA

284 &lt;213&gt; ORGANISM: hairpin RNA targeted to GFP and influenza virus NP transcripts

286 &lt;400&gt; SEQUENCE: 30

287 cgggguggau cuuauuucuu cggaggcagc gggguugcg uccuggacgu agccgcaggu 60

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✓ same errors

289 ccaggcuacg uccaggagcg cauucccugu ccacuccgaa gaaauaagau ccuucccug 119  
292 <210> SEQ ID NO: 31  
293 <211> LENGTH: 119  
294 <212> TYPE: DNA  
295 <213> ORGANISM: hairpin RNA targeted to GFP and influenza virus NP transcripts  
297 <400> SEQUENCE: 31  
298 cggggguugcg cuccuggacg uagccgcagc gggguggauc uuauuucuuc ggaggcaggu 60  
300 ccacuccgaa gaaauaagau ccuucccugu ccaggcuacg uccaggagcg cauucccug 119  
303 <210> SEQ ID NO: 32  
304 <211> LENGTH: 51  
305 <212> TYPE: DNA  
306 <213> ORGANISM: shRNA targeted to influenza virus NP transcript  
308 <400> SEQUENCE: 32  
309 ggaucuauu ucuucggaga uucaagagau cuccgaagaa auaagauccu u 51



RAW SEQUENCE LISTING ERROR SUMMARY  
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Input Set : A:\MIT-0507.ST25.txt  
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Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:17; Line(s) 165  
Seq#:18; Line(s) 174  
Seq#:19; Line(s) 185  
Seq#:20; Line(s) 194  
Seq#:21; Line(s) 203  
Seq#:22; Line(s) 212  
Seq#:24; Line(s) 230  
Seq#:25; Line(s) 239  
Seq#:26; Line(s) 248

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/674,087

DATE: 07/16/2004

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Input Set : A:\MIT-0507.ST25.txt

Output Set: N:\CRF4\07162004\J674087.raw